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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,643	12/22/2000	Todd M. Boyce	285-113 CON	1535

7590

06/07/2004

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EXAMINER

PELLEGRINO, BRIAN E

ART UNIT

PAPER NUMBER

3738

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>09/745,643</p>	<p>Applicant(s)</p> <p>BOYCE ET AL.</p>	
	<p>Examiner</p> <p>Brian E Pellegrino</p>	<p>Art Unit</p> <p>3738</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-17 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 and 25-27 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,20-22 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

After review of Applicant's appeal brief and reconsideration some of the rejections are withdrawn and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Marino (6290724). Marino shows (Fig. 1A) a vertebral implant having a body portion with at least two tabs **36** longitudinally placed from the two ends (**22,24**) of the vertebral implant. It can be seen that the tabs extend radially outward from the body portion.

Claims 1,2,4-9,20,21 are rejected under 35 U.S.C. 102(e) as being anticipated by Bianchi et al. (6033438). Bianchi shows (Fig. 11) a vertebral implant having a substantially cylindrical body portion with two ends. Fig. 14 illustrates the body has at least two tabs **542** longitudinally placed from the ends of the vertebral implant. It can be seen that the tabs extend radially outward from the body portion. Please note the claims are interpreted in light of the specification, and thus the prior art threads can be considered as tabs since Applicant's disclosure states that tabs can be threads (page 4, lines 12,13). Bianchi also discloses the implant is made of bone, col. 3, lines 33-36. It can also be construed that the tabs possess a configuration to match the preformed recess or cavity formed in the vertebrae, col. 3, lines 40-42. With respect to claim 4, it

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can be seen in Fig. 14 that there is one throughbore with a central axis, which is substantially perpendicular to the longitudinal axis. With respect to claim 5, it can be seen that the dimension of the thread that extends beyond the main body has a width that is less than the maximum diameter of the cylindrical body, Fig. 14. Regarding claim 6, it can be seen one end has an installation slot. The tabs are radially spaced from the throughbore since they are threads around the circumference. There are also a pair or more tabs on the implant since it is threaded. With respect to claim 20, Bianchi suggest that animal bone can be used or human bone, col. 10, lines 34-36.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchi et al. '438 in view of Lewandrowski et al. (J. Biomat. Res.). Bianchi is explained supra. However, Bianchi does not disclose the implant surface is demineralized.

Lewandrowski et al. teach that demineralization enhances bone osteoinductive properties, p.365. It would have been obvious to one of ordinary skill in the art to use demineralized bone as taught by Lewandrowski et al. in the implant of Bianchi in order to provide a prosthesis capable of stabilizing the vertebrae while stimulate bone ingrowth.

Allowable Subject Matter

Claim 23 is allowed.

Response to Arguments

Applicant's arguments filed 4/26/04 have been fully considered but they are not persuasive. With respect to the remarks that the Marino implant does not include "radially extending tabs", it is the examiner's position that the Marino implant does have a radius. Microsoft reference dictionary states that a radius is: A line segment that joins the center of a regular polygon with any of its vertices. Therefore, the Marino tabs do extend radially outward. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Pellegrino whose telephone number is (703) 306-5899. The examiner can normally be reached on Monday-Thursday from 9am to 6:30pm. The examiner can also be reached on alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached at (703) 308-2111. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

TC 3700, AU 3738
Brian E. Pellegrino

Brian E. Pellegrino